

Amendment I, Responsive to 31 May 2006 action

Appl. no. 09/670,705
Atty. ref. 1G012a0fUS

Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in this application.

LISTING OF CLAIMS

1-31 (*canceled*).

32 (*Previously presented*). A method for fabricating an insulating glazing unit that includes

- (1) a first glass sheet having a first perimeter,
- (2) a second glass sheet having a second perimeter, and
- (3) disposed intermediate said first and second glass sheets and inwardly from said first and second perimeters, a single spacer frame comprising a foam body, a moisture barrier layer attached to said foam body, and two insets that define two notches, wherein said first and second glass sheets and said frame cooperate to define an insulating chamber inward of said frame and a channel outward thereof, said method comprising:
 - a) utilizing an adhesive to directly bond said first and second glass sheets to opposing sides of said spacer frame so that said moisture barrier layer and said notches face said channel and so that each of said notches is adjacent one of the first and second glass sheets;
 - b) applying a moisture impermeable primary sealant material only in each of the notches so the moisture impermeable primary sealant being applied within a notch contacts the spacer frame and the glass sheet adjacent the notch at the same temperature and pressure so as to hermetically seal said insulating chamber, whereby at least a portion of said primary sealant material contacts each of said first and second glass sheets; and
 - c) subsequently applying a structural sealant material over said primary sealant material, thereby providing said insulating glazing unit.

33 (*Previously presented*). The method of claim 32 wherein said spacing frame comprises desiccant accessible to said insulating chamber.

34-35 (*Cancelled*).

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36 (*Previously presented*). The method of claim 32 wherein said moisture impermeable primary sealant material is applied at a first station with a first application nozzle and wherein said structural sealant material is applied at a second station with a second application nozzle, said first and second stations being spaced apart from one another.

37 (*Previously presented*). The method of claim 32 wherein said moisture impermeable primary sealant material is applied with a first applicator and wherein said structural sealant material is applied with a second applicator, said second applicator trailing said first applicator.

38 (*Previously presented*). The method of claim 37 wherein said first applicator is retracted prior to introduction of said second applicator.

39 (*Previously presented*). The method of claim 32 wherein said moisture impermeable primary sealant material comprises hot-melt butyl rubber or polyisobutylene.

40 (*Previously presented*). The method of claim 32 wherein said structural sealant comprises a thermoset.

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41 (New). A method for fabricating an insulating glazing unit that includes

- (1) a first glass sheet having a first perimeter,
- (2) a second glass sheet having a second perimeter, and
- (3) disposed intermediate said first and second glass sheets and inwardly from said first and second perimeters, a single spacer frame comprising a foam body, a moisture barrier layer attached to said foam body, and two insets that define two notches, each notch being tapered;

wherein said first and second glass sheets and said frame cooperate to define an insulating chamber inward of said frame and a channel outward thereof, the tapered notches being wider adjacent the channel and more narrow closer to the chamber; said method comprising:

- a) utilizing an adhesive to directly bond said first and second glass sheets to opposing sides of said spacer frame so that said moisture barrier layer and said tapered notches face said channel and so that each of said tapered notches is adjacent one of the first and second glass sheets;
- b) applying a moisture impermeable primary sealant material only in each of the tapered notches so the moisture impermeable primary sealant being applied within a tapered notch contacts the spacer frame and the glass sheet adjacent the tapered notch at the same temperature and pressure so as to hermetically seal said insulating chamber, whereby at least a portion of said primary sealant material contacts each of said first and second glass sheets; and
- c) subsequently applying a structural sealant material over said primary sealant material, thereby providing said insulating glazing unit.

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- 42 (New). A method for fabricating an insulating glazing unit that includes
- (1) a first glass sheet having a first perimeter,
 - (2) a second glass sheet having a second perimeter, and
 - (3) disposed intermediate said first and second glass sheets and inwardly from said first and second perimeters, a single spacer frame comprising a foam body, a moisture barrier layer attached to said foam body, and two insets that define two notches, each notch being tapered and having a curved wall defined by the spacer;
- wherein said first and second glass sheets and said frame cooperate to define an insulating chamber inward of said frame and a channel outward thereof, the tapered notches being wider adjacent the channel and more narrow closer to the chamber; said method comprising:
- a) utilizing an adhesive to directly bond said first and second glass sheets to opposing sides of said spacer frame so that said moisture barrier layer and said tapered notches face said channel and so that each of said tapered notches is adjacent one of the first and second glass sheets;
 - b) applying a moisture impermeable primary sealant material only in each of the tapered notches so the moisture impermeable primary sealant being applied within a tapered notch contacts the spacer frame and the glass sheet adjacent the tapered notch at the same temperature and pressure so as to hermetically seal said insulating chamber and entirely fills the tapered notch, whereby at least a portion of said primary sealant material contacts each of said first and second glass sheets; and
 - c) subsequently applying a structural sealant material over said primary sealant material, thereby providing said insulating glazing unit.